### **Robots & Overhang Beams**





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# nside-Out Glazing Mad

### EMU Dual Circuit 1300 - 500kgl

The Ergonomic Manipulating Unit (EMU) is an innovative machine with a unique manipulating head designed to glaze a building from the 'inside-out' when craneage or scaffolding is impractical.

With recognition from the Design Council and given the Quality in Construction Award by Construction News, the EMU has a unique manipulating head that can angle and push glass, curtain walling and unitized glazing panels outside of a building envelope, realign them and then pull them back into position for fixing.

The flexible hydraulic lifting head slews  $80^\circ$  left and right, tilts up and down  $80^\circ$  and rotates continuously  $360^\circ$  to manipulate loads into the ideal angle ready for fitting. The boom also slews up to  $90^\circ$  left and right to assist in load pick up.

Independently powered with an on-board drive system, the EMU has the mobility to access tight interior areas. Its four outriggers enhance stability and reduce the floor loading of the machine.

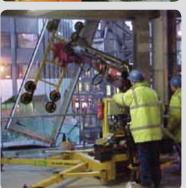
#### **Reference Code**

GRE05







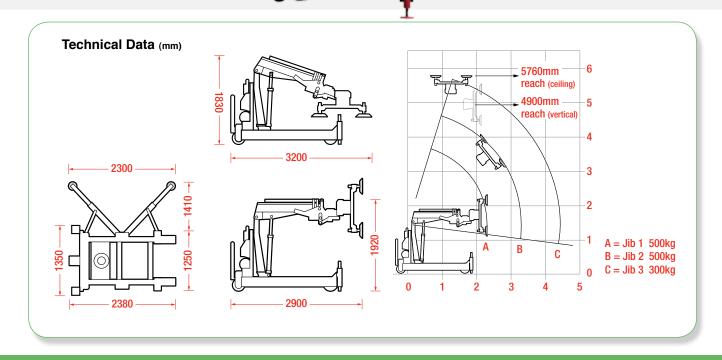


#### **Technical Specifications**

Safe working load	jibs 1 & 2: jib 3:	500kg 300kg
Suitable for lifting	material properties: surface: example:	gastight / non-porous smooth glass, plastic boards, ceramic plates, sheet metals, coated boards
Weight	with counterweights: without counterweights:	1650kg 1450kg
Width	folded:	1350mm (with counterweights), 1250mm (without)
Length	length:	3200mm
Height	folded:	1830mm
Number of suction cups	cups:	4 - 12 depending on configuration. Standard frame is 10 cups and 2 extension arms. Custom built frames are available. Curved frame option also available.
Powered head tilt	powered head tilt:	80° up & down
Powered head sideshift	movement:	100mm
Powered pad frame rotation	rotation:	360° continuous
Powered head slew	left & right:	80°
Powered boom slew	left & right:	90°
Vacuum system	dual circuit:	1 pump, 2 vacuum reserve tanks
Power requirements	options:	Manipulation of the head and arm is powered by 110v/32A site supply. An LPG powered generator is available for situations where site supplies are not preser
Optional accessories	optional:	4 section extra length hydraulic boom, increases length by 1m and reduces capacity to 200kg

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## nside-Out Glazing In Tig

## EMU 1000 Dual Circuit [1000kg]

The EMU 1000, with a lifting capacity of 1000kg, is specifically designed for interior and exterior use when craneage is too costly, impractical or impossible.

The unique manipulating head enables 'inside-out' glazing. It can angle and push a unit outside the envelope, realign it and then pull it back into position for fixing. In addition, the EMU's on-board drive system provides the mobility to access tight interior areas.

#### **Key Features**

- Capacity 1000kg (with extension arms), 750kg (without arms)
- Dual circuit vacuum system with vacuum gauge, reserve tank and non-return valve for each circuit
- · 5.6m reach from floor to pad face
- · Working radius 4.6m
- · Six outriggers provide stability and reduce floor loading
- Unique, patented head allows a unit to be manipulated with ease through:
  - · 80° left and right of centre
  - 80° up and down from centre
  - 360° non-continuous rotation
  - 100mm parallel movement either side of head centre axis
- · Boom slews 90° left and right
- On-board maintenance-free vacuum pump
- 12v battery with integral charger or 110v mains
- Audio-visual low vacuum warning
- Weight: 3000kg (with counterweights)







EMU 1000 with counterweights

#### **Technical Specifications**

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Safe working load	jibs 1 & 2: jib 3:	1000kg (with extension arms), 750kg (without extension arms) 1000kg (with extension arms), 750kg (without extension arms)
Suitable for lifting	material properties: surface: example:	gastight / non-porous smooth glass, plastic boards, ceramic plates, sheet metals, coated boards
Weight	with counterweights: without counterweights:	3000kg 2500kg
Width	folded:	1500mm
Length	folded:	3300mm (4350mm with counterweight pack)
Height	folded:	2100mm
Number of suction cups	cups:	10 cups (750kg) - 14 cups (1000kg)
Powered head tilt	powered head tilt:	80° up & down
Powered head sideshift	movement:	100mm
Powered pad frame rotation	rotation:	360° non-continuous
Powered head slew	left & right:	80°
Powered boom slew	left & right:	90°
Vacuum system	dual circuit:	1 pump, 2 vacuum reserve tanks
Power requirements	options:	Manipulation of the head and arm is powered by 110v/32A site supply. An LPG- powered generator is available for situations where site supplies are not presen







MU 1000 Dual Circuit











